

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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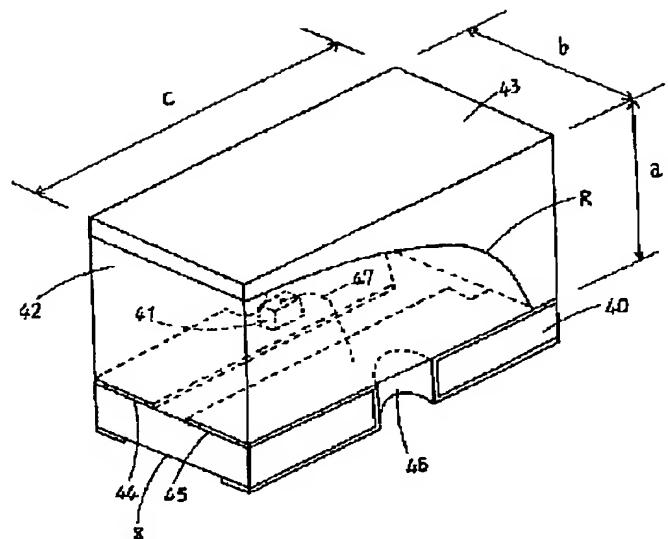
APPLICATION DATE : 22-10-96  
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APPLICANT : SHARP CORP;

INVENTOR : OKAZAKI ATSUSHI;

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TITLE : SIDE-EMISSION CHIP LED



ABSTRACT : PROBLEM TO BE SOLVED: To provide a side-emission chip LED which is wide in a horizontal effective irradiation region and high in brightness.

SOLUTION: A light emitting element 41 mounted on a base 40 is sealed up in a light transmitting body 42, and a reflector 43 which reflects light emitted from the elements 41 is provided covering a part of the surface of the light transmitting body 42. The reflector 43 is possessed of a reflecting surface R whose surface is curved like a part of a parabola, and the light emitting element 41 is disposed off the center line of the parabola in a vertical direction, and then irradiation light is diffused in a horizontal direction but constricted in a vertical direction so as to become high in directivity, where the half-value angle of the irradiation light in a horizontal direction is larger than that in a vertical direction.

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